

INTERNATIONAL SEARCH REPORT

PCT/GB 03/02698

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 E21B7/06 E21B17/10 E21B4/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, TULSA, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 319 649 A (JETER JOHN D) 16 March 1982 (1982-03-16) the whole document ---	1-4, 9, 10, 12, 13
X	DE 41 13 986 A (PREUSSAG ERDOEL UND ERDGAS GMB) 12 November 1992 (1992-11-12) the whole document ---	1
X	US 6 173 794 B1 (VON GYNZ-REKOWSKI GUNTHER ET AL) 16 January 2001 (2001-01-16) abstract; figures 1-9 ---	9, 10
X	US 5 316 093 A (BOULET JEAN ET AL) 31 May 1994 (1994-05-31) the whole document ---	12, 13
A		1
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

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- *P* document published prior to the International filing date but later than the priority date claimed

T later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

22 January 2004

Date of mailing of the international search report

30/01/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl
Fax: (+31-70) 340-3016

Authorized officer

Van Berlo, A

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 5 186 265 A (HENSON RANDY H ET AL) 16 February 1993 (1993-02-16) the whole document ---	12
A	US 5 269 383 A (FORREST JOHN) 14 December 1993 (1993-12-14) column 3, line 55 -column 5, line 25; figures 1C,3 ---	1
A	US 4 361 077 A (MILLS NED D) 30 November 1982 (1982-11-30) the whole document ---	1
A	WO 98 37300 A (RAVENSBERGEN JOHN E ;BJ SERVICES COMPANY U S A (US); PORTMAN LANCE) 27 August 1998 (1998-08-27) figures 4,6 ---	1,12
A	US 5 553 678 A (BARR JOHN D ET AL) 10 September 1996 (1996-09-10) figure 30 ---	1,9,12

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